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EXAMINER	
LEE, PHILIP C	
ART UNIT	**PAPER NUMBER**
2152	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/611,560	CARROLL ET AL.	
	Examiner	Art Unit	
	Philip C. Lee	2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 June 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *6/30/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-38 are presented for examination.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-6, 13-18, 25-30, and 37 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3-4, 10-12, 18, 20-21, 27-29, 35, 37-38, 44-46, and 52-53 of copending Application No. 10/611,779. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following: Claims 1, 3-4, 10-12, 18, 20-21, 27-29, 35, 37-38, 44-46, and 52-53 of

application No. 10/611,779 contain every element of claims 1-6, 13-18, 25-30, and 37 of the instant application and thus anticipate the claims of the instant application. Claims of the instant application therefore are not patently distinct from the earlier patent claims and as such are unpatentable over obvious-type double patenting. A later application claim is not patentable distinct from an earlier claim if the later claim is anticipated by the earlier claim.

"A later patent claim is not patentably distinct from an earlier patent claim if the later claim is obvious over, or **anticipated by**, the earlier claim. In re Longi, 759 F.2d at 896, 225 USPQ at 651 (affirming a holding of obviousness-type double patenting because the claims at issue were obvious over claims in four prior art patents); In re Berg, 140 F.3d at 1437, 46 USPQ2d at 1233 (Fed. Cir. 1998) (affirming a holding of obviousness type double patenting where a patent application claim to a genus is anticipated by a patent claim to a species within that genus). " ELI LILLY AND COMPANY v BARR LABORATORIES, INC., United States Court of Appeals for the Federal Circuit, ON PETITION FOR REHEARING EN BANC (DECIDED: May 30, 2001).

"Claim 12 and Claim 13 are generic to the species of invention covered by claim 3 of the patent. Thus, the generic invention is **"anticipated"** by the species of the patented invention. Cf., Titanium Metals Corp. v. Banner, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985) (holding that an earlier species disclosure in the prior art defeats any generic claim) 4 . This court's predecessor has held that, without a terminal disclaimer, the species claims preclude issuance of the generic application. In re Van Ornum, 686 F.2d 937, 944, 214 USPQ 761, 767 (CCPA 1982); Schneller ,

397 F.2d at 354. Accordingly, absent a terminal disclaimer, claims 12 and 13 were properly rejected under the doctrine of obviousness-type double patenting." (In re Goodman (CA FC) 29 USPQ2d 2010 (12/3/1993).

3. Claims 1-7, 13-19, 25-31, and 37 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3, 7-10, 11-13, 17-20, 21-23, 27-30, and 31 of copending Application No. 10/611,276. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following: Claims 1-3, 7-10, 11-13, 17-20, 21-23, 27-30, and 31 of application No. 10/611,276 contain every element of claims 1-7, 13-19, 25-31, and 37 of the instant application and thus anticipate the claims of the instant application. Claims of the instant application therefore are not patently distinct from the earlier patent claims and as such are unpatentable over obvious-type double patenting. A later application claim is not patentable distinct from an earlier claim if the later claim is anticipated by the earlier claim.

4. These are provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections – 35 USC 101

5. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-12, 37, and 38 are rejected under 35 U.S.C. 101 because "A system" comprising interfaces (i.e., software) or means for providing interfaces does not include any functional structure of a system. A system (i.e., apparatus) comprising interfaces (i.e., software) or means for providing interfaces is considered as program per se, which is not one of the categories of statutory subject matter.

7. Claims 13-24 are rejected under 35 U.S.C. 101 because "A method for executing bulk data transfers" giving its broadest interpretation can be considered as a "software program for executing bulk data transfer" and it does not produce a useful, concrete and tangible result.

8. Claims 25-36 are rejected under 35 U.S.C. 101 because "Software for executing bulk data transfers" does not produce a useful, concrete and tangible result and software is considered as program per se, which is not one of the categories of statutory subject matter.

Claim Rejections – 35 USC 112

9. Claims 1-38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. Claim language in the following claims is not clearly understood:

i. As per claim 1, line 10, it is unclear if "a bulk data transfer" in lines 10 refers to "a bulk data transfer" in line 5 [i.e., if they are the same, then "the bulk data transfer" or "said bulk data transfer" must be used]; Line 11, it is unclear if "one or more data entities" refers to "one or more data entities" in line 6; Line 13, it is unclear if "each programmatic interface" refers to "one or more programmatic source interfaces" in line 3 or "one or more programmatic target interfaces" in 8; Lines 14, 16-17, and 18-20, it is uncertain if "the corresponding data store" refers to "the corresponding source data store" in line 6 or "the corresponding target data store" in line 11; Lines 20-21, it is unclear if "any other particular data stores" refers to "any other particular data stores" in line 17.

ii. As per claim 6, line 2, it is unclear if "each programmatic interface" refers to "one or more programmatic source interfaces" in line 3 of claim 1 or "one or more programmatic target interfaces" in 8 of claim 1.

iii. As per claim 7, line 3, it is uncertain if "a programmatic source interface" refers to "one or more programmatic source interfaces" in line 3 of claim 1; Line 5, it is unclear if "a programmatic target interface" refers to "one or more programmatic target interfaces" in 8 of claim 1.

iv. As per claim 8, lines 3 and 8-9, it is unclear if "one or more programmatic interfaces"/"the programmatic interfaces" refers to "one or more programmatic source interfaces" in line 3 of claim 1 or "one or more programmatic target interfaces" in 8 of claim 1.

v. As per claim 9, line 1, it is unclear if "a session interface" refers to "one or more session interfaces" in lines 1-2 of claim 8.

vi. As per claim 10, lines 2, 4-5, it is unclear if "each programmatic interface"/ "a programmatic source interface"/ "a programmatic target interface" refers to "one or more programmatic source interfaces" in line 3 of claim 1 or "one or more programmatic target interfaces" in 8 of claim 1.

vii. As per claim 11, lines 2, 6-7, it has the same problem as claim 10 above.

viii. As per claim 13 lines 11,12, 14-15, 17-19 and 21-22 have the same problem as claims 1 above.

ix. As per claim 18, line 2, they have the same problems as claim 6 above.

x. As per claim 19, line 3, they have the same problems as claim 7 above.

xi. As per claims 20 (line 3), 21 (line 1), and 22 (lines 2, 4-5), they have the same problem as claims 8, 9, and 10 respectively.

xii. As per claim 25, lines 12-13, 15, 16, 18-19, 20, and 22-23, they have the same problems as claim 1 above.

xiii. As per claims 30, 31, 32, 33, and 34, they have the same problem as claims 6, 7, 8, 9, and 10 respectively.

xiv. As per claims 37 and 38, they have the same problem as claim 1 above.

Claim Rejections – 35 USC 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

11. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

12. Claims 1, 4-6, 8-9, 13, 16-18, 20-21, 25, 28-30, 32-33 and 37-38 are rejected under 35 U.S.C. 102(e) as being anticipated by Jayaram et al, U.S. Patent 6,996,589 (hereinafter Jayaram).

13. As per claims 1, 13, 25 and 37, Jayaram teaches the invention as claimed comprising:

one or more programmatic source interfaces, each being associated with a corresponding source data store, defined according to a common programmatic source interface specification (col. 11, lines 1-5), and exposed during a bulk data to enable extraction from the corresponding source data store one or more data entities for loading into any one or more selected target data stores during the bulk data transfer (col. 11, lines 5-11); and

one or more programmatic target interfaces, each being associated with a corresponding target data store, defined according to a common programmatic target interface specification (col. 11, lines 5-11), and exposed during a bulk data transfer to enable loading into the corresponding target data store one or more data entities extracted from any one or more selected source data stores during the bulk data transfer (col. 11, lines 5-11);

each programmatic interface: providing to the corresponding data store an abstraction of bulk data transfer operations such that custom code need not be developed in connection with the corresponding data store to enable bulk data transfers between the corresponding data store and any other particular data stores (col. 12, lines 35-38); and

isolating specific details associated with the corresponding data store such that custom code need not be developed in connection with bulk data transfers to enable bulk data transfers between the corresponding data store and any other particular data stores (col. 16, lines 42-52).

14. As per claims 4, 16, and 28, Jayaram teaches the invention as claimed in claims 1, 13, and 25 above. Jayaram further teach a particular data store may be a source data store or a target data store for a particular bulk data transfer depending on whether data entities are extracted from the particular data store or loaded into the particular data store during the particular bulk data transfer (inherent in col. 2, lines 15-20).

15. As per claims 5, 17, and 29, Jayaram teaches the invention as claimed in claims 1, 13, and 25 above. Jayaram further teach loading data entities comprises inserting, updating, or deleting data entities (col. 11, lines 1-11) (uploading data must comprises inserting data into a target system).

16. As per claims 6, 18, and 30, Jayaram teaches the invention as claimed in claims 1, 13, and 25 above. Jayaram further teach within each programmatic interface, one or more resources representing data entities contained in the corresponding data store are defined (col. 14, lines 18-22); and the system is operable to, in response to a request to execute a bulk data transfer involving one or more resources contained in one or more data stores (col. 10, lines 56-63), create each programmatic interface within which at least one of the resources is defined (col. 14, lines 26-28).

17. As per claims 8, 20, and 32, Jayaram teaches the invention as claimed in claims 6, 18, and 30 above. Jayaram further teach one or more programmatic interfaces are defined within each session interface (col. 16, lines 24-26); each session interface isolates from its one or more defined programmatic interfaces details associated with export and import of resources involved in a bulk data transfer (col. 16, lines 26-52); and the system is further operable to, in connection with creating the programmatic interfaces, create each session interface within which at least one of the programmatic interfaces is defined (col. 16, lines 21-26).

18. As per claims 9, 21, and 33, Jayaram teaches the invention as claimed in claims 8, 20, and 32 above. Jayaram further teach session interface persists, once created, either for the entirety of the bulk data transfer or for the entirety of multiple data transfers according to its definition (col. 16, lines 22-52).

19. As per claim 38, Jayaram teaches the invention as claimed comprising: one or more programmatic source interfaces, each being associated with a corresponding source data store, defined according to a common programmatic source interface specification (col. 11, lines 1-5), and exposed during a bulk data transfer to enable extraction from the corresponding source data store of one or more data entities for loading into any one or more selected target data stores during the bulk data transfer (col. 11, lines 5-11); one or more programmatic target interfaces, each being associated with a corresponding target data store, defined according to a common programmatic target interface specification (col. 11, lines 5-11), and exposed during a bulk data transfer to enable loading into the corresponding target data store of one or more data entities extracted from any one or more selected source data stores during the bulk data transfer (col. 11, lines 5-11); each programmatic interface: providing to the corresponding data store an abstraction of bulk data transfer operations such that custom code need not be developed in connection with the corresponding data store to enable bulk data transfers between the corresponding data store and any other particular data stores (col. 12, lines 35-38); isolating specific details associated with the corresponding data store such that custom code need not be developed in connection with the bulk data transfer operations to enable bulk data transfers between the corresponding data store and any other particular data stores (col. 16, lines 42-52);

and comprising a definition of one or more resources representing data entities contained in the corresponding data store (col. 14, lines 18-22) such that the system is operable to, in response to a request to execute a bulk data transfer involving one or more resources contained in one or more data stores (col. 10, lines 56-63), create each programmatic interface within which at least one of the resources is defined (col. 14, lines 26-28); and one or more session interfaces, each session interface: comprising a definition of one or more programmatic interfaces (col. 16, lines 24-26) such that the system is further operable to, in connection with creating the programmatic interfaces, create each session interface within which at least one of the programmatic interfaces is defined (col. 16, lines 21-26); and isolating from its one or more defined programmatic interfaces details associated with export and import of resources involved in a bulk data transfer (col. 16, lines 26-52).

Claim Rejections – 35 USC 103

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

21. Claims 10-12, 22-24, and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jayaram.

22. As per claims 10, 22, and 34, although Jayaram teaches allow each programmatic interface to produce or consume data entities in a desired format particular to the programmatic interface (col. 11, line 57-col. 12, line 22); convert data entities produced in a first format particular to a programmatic source interface to a second format particular to a programmatic target interface (col. 5, lines 50-63), however, Jayaram does not teach convert only if necessary because the first and second formats are different. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to include conversion of data only if the first and second formats are different in order to avoid inefficient process of conversion between data stores of the same format.

23. As per claims 11, 23, and 35, although Jayaram teaches one or more programmatic interfaces, each programmatic interface being associated with a corresponding data store and exposed within the data integration server during a bulk data transfer to enable the data integration server to read data entities directly from and write data entities directly to the corresponding relational data store during the bulk data transfer, however, Jayaram does not teach relational interfaces. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to include relational interface as alternative of programmatic interface because by doing so it would allow backup interface for performing the functions of the programmatic interfaces in case of failure in the programmatic interface, thus providing alternative interface without using the programmatic interface.

24. As per claims 12, 24, and 36, Jayaram teaches the invention as claimed in claims 11, 23, and 35 above. Jayaram further teach an interface schema file providing a database-neutral description of a physical database schema of the corresponding relational data store (col. 2, liens 39-55); and an interface mapping file providing a logical-to-physical mapping for all data entities defined for the relational interface to enable the data integration server to execute bulk data transfers between relational data stores having different physical database schema (col. 16, lines 22-41).

25. Claims 7, 19, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jayaram in view of Jennyc et al, U.S. Patent 6,334,158 (hereinafter Jennyc).

26. As per claims 7, 19, and 31, Jayaram does not teach release of interface. Jennyc teaches programmatic interface persists, once created: if a programmatic source interface, resources of the programmatic source interface are released (col. 20, line 65-col. 21, line 5); and if a programmatic target interface, resources of the programmatic target interface are released (col. 20, line 65-col. 21, line 5).

27. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Jayaram and Jennyc because Jennyc's teaching of releasing resource would improve the efficiency of Jayaram's system allowing resources to be release for allocation to other processes.

28. Jayaram and Jennyc do not teach when to release the interface. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to release the interface after the data transfer in order to avoid interruption during the transfer of the data.

29. Claims 2, 14, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jayaram in view of Shannon et al, U.S. Patent Application Publication 2002/0046301 (hereinafter Shannon).

30. As per claims 2, 14, and 26, Jayaram does not teach Java interfaces. Shannon teaches Java interfaces ([0031] and claim 5).

31. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Jayaram and Shannon because Shannon teaching of Java interfaces would provide a greater ease of integration by allowing data to be mapped from one application to another application.

32. Claims 3, 15, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jayaram in view of Casagrande et al, U.S. Patent 6,381,709 (hereinafter Casagrande).

33. As per claims 3, 15, and 27, Jayaram teaches the invention as claimed in claim 1 above. Although Jayaram teaches a programmatic interface may be supporting bulk data transfers (col. 11, lines 1-5); and the system is operable to: create the corresponding programmatic interface to

enable extraction of the data from or loading of the data into the data store (col. 14, lines 26-28); and for data extraction, as the programmatic source interface produces the data extracted from the data store, send the outgoing data; or for data loading, as the data arrives, send the incoming data to the programmatic target interface for loading into the data store (col. 11, lines 1-11), however, Jayaram does not teach industry standard interface and industry standard protocol. Casagrande teaches an interface supporting data transfer according to an industry standard protocol (fig. 4, col. 8, lines 60-67); receive a request from a client indicating that the client is extracting data from or loading data into a data store in accordance with the industry standard protocol (col. 3, lines 48-51); and send the outgoing data to the client in accordance with the industry standard protocol (col. 3, lines 1-4).

34. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Jayaram and Casagrande because Casagrande teaching of industry standard protocol interface would enhance and make it easier for Jayaram's system to transfer data between data stores using well known protocol such as FTP.

CONCLUSION

35. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Cox et al, US 2005/0223392.

36. A shortened statutory period for reply to this Office action is set to expire THREE MONTHS from the mailing date of this action. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip C Lee whose telephone number is (571)272-3967. The examiner can normally be reached on 8 AM TO 5:30 PM Monday to Thursday and every other Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

P.L.

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SUPERVISORY PATENT EXAMINER